

REMARKS

An advisory action mailed on November 17, 2004 declined to enter the amendments and remarks presented in a response transmitted on October 29, 2004 to the Final Office Action mailed August 31, 2004. In response, Applicants herein request continued examination of this application and entry of those amendments and remarks resubmitted herewith.

Applicants thank the Examiner for withdrawing the previous 35 U.S.C. §112, second paragraph and 35 U.S.C. §103 (a) rejections. Applicants further thank the Examiner for rejoining claims 35-40.

Applicants have amended claims 21 – 23 and 32, have canceled claim 31 and have added new claims 41-44. Claims 1-20 and 24-29 had been canceled previously. Upon entry of this amendment claims 21-23, 30 and 32-44 will be under consideration. Further remarks follow in reference to the rejections made by the Examiner.

Rejection of Claims Under 35 U.S.C. §112, First Paragraph

The claims were rejected under 35 U.S.C. §112, first paragraph on the grounds that the specification does not contain a written description of the claimed invention and does not convey to one skilled in the art that the inventors had possession of the claimed invention at the time the application was filed.

Specifically, the Examiner, in paragraph 4, rejected claims 22-23 and 30-34 by stating that the specification and the claims as originally filed do not provide support for the invention as claimed, e.g. the generic method comprising the steps of claim 22 and the limitations of claims 23 and 30-34. Applicants respectfully traverse this rejection for the following reasons.

Applicants have amended claims 22 and 23 to be essentially claims 22 and 23 as filed. In addition, Applicants have canceled claim 31. Applicants reiterate the locations of support for the dependent claims can be found at page 37, line 25 through page 38 line 4 and page 43, lines 13-15.

In the Office Action of August 31, 2004, the Examiner stated that there was no generic disclosure of a method encompassing all of the integrin β 's of the independent claim 21 in a method of identifying signaling employing the generic method of claim 22. In response, Applicants amended claim 21 to remove the recitation of the individual integrin β subunits. Support for amended claim 21 can be found claim 21 as filed and at page 37, lines 10-17. The recitation of individual integrin β subunits were moved to new claims 41-44. Support for new claims 41-42 can be found in the specification as previously described. Support for new claim 43 can be found at page 43, lines 4-6 and support for new claim 44 can

be found at page 43 lines 13-17. In the Advisory Action of November 17, 2004, the Examiner commented on the broadening effect of Applicants' October 29, 2004 amendment to claim 21. In response, Applicants have added a further limitation to claim 21, wherein the β integrin does not have an ITAM motif. Support for this amendment can be found in the specification at page 19, lines 20-25.

Applicants believe that the amended claims 21 and 22 (amended claim 23 and claims 30 and 32-34 dependent thereon) have support in the specification and claims as filed and respectfully request that the Examiner withdraw these rejections.

In paragraph 6 of the August 31, 2004 Office Action, claims 21-23 and 30-40 were rejected on the grounds that the specification and the claims as originally filed do not support the amendment to claim 21 made in the response filed on June 29, 2004. These amendments added the terms "outside-in or inside-out" to describe the "signaling" term recited in claim 21, because the Examiner considered "signaling" to be an indefinite term. In that previous rejection (paragraph 5 of Office Action mailed March 29, 2004), from reading the specification, the Examiner stated that "it is likely Applicant intends the term to encompass the outside-in and inside-out signal transduction described in the specification." Applicants are confused as to how "outside-in" and "inside-out" are described in the specification, but putting the terms in the claims is an act of adding new matter. Applicants would prefer to remove the "outside-in or inside-out" terms on the grounds that the bounds of "signaling" by integrins at the time of filing was well known in the art as outside-in or inside-out as evidenced by the discussions on pages 1 through 5, e.g., page 1, lines 17-20, page 2, lines 9-11, lines 23 to page 3 line 2 and page 4, lines 4-5 and line 21 to page 5, line 3. These discussions and the background references extensively review how signaling in the context of integrins means "inside out" or "outside in" signaling and what sort of cellular responses occur from such signaling. However, Applicants presently are retaining the added terms and now provide additional instances of support in the specification. For example, further support for the terms can be found at page 29, line 15 and page 31, lines 7-8. Applicants request that the Examiner reconsider the wording regarding the integrin-mediated signaling and withdraw the rejection or suggest alternatives.

CONCLUSIONS

The foregoing amendments and remarks are being made to place the Application in condition for allowance. Applicants respectfully request reconsideration and the timely allowance of the pending claims. Applicants respectfully submit that the rejections of claims 21-23, 30 and 32-44 under 35 U.S.C.

§ 112 are herein overcome and that this application is now in condition for allowance. Early notice to this effect is solicited.

If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is encouraged to call the undersigned.

This paper is being filed timely within three months of the mailing date of the final action. No extensions of time are required. In the event any extensions of time are necessary, the undersigned hereby authorizes the requisite fees to be charged to Deposit Account No. 501668.

November 23, 2004

Respectfully submitted,

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